

Chapter XVII

METHOD WITHIN THE LESSON

HERBART'S FIVE FORMAL STEPS

WHAT are known as the Five Formal Steps in lesson-giving provide us with a convenient framework for a lesson or a series of lessons. Into this framework any subject can be fitted, having regard to the nature of the subject. You can see the advantage of this. It is time-saving and labour-saving. Instead of having to plan each lesson afresh you have a permanent plan on which a lesson on any part of any subject may be given, even though the subjects themselves have inherent differences, and—within the framework—will require different handling (502-3).

563. Although the Herbartians were the first to formalize such a plan, the method is so natural that teachers who never heard of Herbart will often give a lesson in much the same way. But for one teacher who has this instinctive sense of order and method there are a hundred who have not; so it is better not to leave it to chance.

564. The five steps are—

- (1) Preparation.
- (2) Presentation.
- (3) Association.
- (4) Generalization.
- (5) Application.

Besides these, great stress is laid on the statement of the *aim* of the lesson.

Perhaps this looks difficult; but the more

teachers think about it the more they will value the help it gives, the more natural it will seem to them.

First Step. Preparation.

565. This refers to the preparation of the pupil's mind for what is about to be presented to it; but it also helps to steady the teacher's mind, and bring it into harmony with the mind of the pupil.

'Preparation may be divided into two parts, the first of which the teacher undertakes alone, the second with his pupils. First, before any lesson the teacher must ask himself, "What do my pupils know of the subject in hand? And what ought they to know if they are to understand it thoroughly?" Every teacher should be sufficiently acquainted with his pupils to estimate the extent of the knowledge he can assume in them.'—*Herbart-Felkin*.

The statement of the aim of the lesson is really a part of the Preparation Step, because the announcement of the subject arouses attention and interest, and whatever associated ideas exist come spontaneously into the pupil's consciousness (285). We know from our own experience that this happens in all minds, adult as well as juvenile. We go to a lecture because we already have some knowledge of the subject. That knowledge we take with us. It is by its means that we assimilate what the lecturer may tell us. The amount of knowledge need not be great, but it must be sufficient to give us an interest in the lecture. If we have no ideas about the subject we stay at home.

566. When the kindergarten teacher says, 'Now we are going to talk about how swallows build

their nests,' into the minds of the little ones come whatever notions they have about birds and nests in general; and as very young children are always eager to tell how much they know, the teacher is soon in possession of the ideas of the class, and knows how much of their knowledge is sufficiently accurate, how much is wrong, and what is lacking in their apperception masses. Older pupils will not be so ready to lay bare their souls. Then we must question out of them the knowledge needed for immediate use. In either case the teacher must set in order whatever ideas the pupils have about the subject, separate the immediately essential from the unessential, and fill up the gaps before the Preparation Step is complete.

'The teacher must make sure that the apperceiving ideas are (a) sufficiently numerous, (b) sufficiently clear, and (c) are in the right order to apperceive the new.'—*Herbart-Felkin*. This preparatory step is really an analysis of the pupil's mind.

567. The preparation for a new idea is cumulative. It may be a matter of months, or years. We have seen how we often have to go back to the pupil's store of nursery songs and rhymes to illustrate lessons both in pitch and time (194).

568. The amount of deliberate preparation in a lesson, and how far back we should go for it, depends on the nature of the lesson. For example, the causes of the Civil Wars and establishment of the Protectorate are found in the events immediately preceding, and the preparation for a lesson on that period would be merely a *résumé* of those events. But if we want to make it clear

how it happens that our present reigning house is of German origin we must go back to the reign of James I.

569. We have similar examples in the teaching of musical notation. The apperceptive ideas that we want may have been given in the last lesson and be quite fresh in the mind. For instance, the pulse-groups  and  are modifications of , which would be taught in the previous lesson. But for the first time-lesson in Step 2, the continued half-pulse in its two forms,  and , we have to seek the related ideas in the Fourth Lesson of the Preliminary Course, given perhaps two terms previously, where the use of the tie was taught, and of the dot as a substitute for a tied note.* This selection of the ideas to which we can directly 'tack on' is very important.

Second Step. Presentation.

570. The apperceiving ideas having been found, the process of tacking on begins—the presentation of the new matter of the lesson. Here, again, the selective process is necessary. We are told that:

'The ideas to be presented in any lesson must be carefully selected in view of (a) the nature of the ideas found to be already existing in the mind, and (b) the ideas we propose to introduce in later lessons.'—*Adams*.

571. Such a selection is a large order for a young teacher, more especially a young *music*

* References to Lessons in 'Guide.'

teacher; for music is so many-sided that its parts have to be separated for teaching purposes, each topic developed according to its nature, all taught concurrently and welded together. This makes it rather more difficult to plan out a course of lessons in musical knowledge than in other school subjects.

572. Fortunately, as to condition (*b*), we can be much helped by a text-book. In a really good text-book on any subject the series of lessons will have been thought out by an expert, some one whose knowledge and experience have enabled him to see the end from the beginning and the whole way of approach. The text-book supplies a programme for the complete course, and an indication at least of a possible unit for a lesson (511). But in dealing with condition (*a*), the mental content of the individual child, the teacher is thrown entirely on her own resources. It is here that she needs help, and Herbart gives it.

‘Presentation,’ he says, ‘is mainly governed by (*a*) the law of successive clearness, and (*b*) the law of the alternation of concentration and reflection.’

573. (*a*) *Clearness*. The first condition of a good presentation is that it shall be clear. Clear as to its place in the development of the subject (442). Clear as to the teacher’s choice of language (258). Clear in the sense of simplicity or *singleness*. Teachers who are well up in their subject are apt to make the mistake of presenting too many aspects of a fact at its first introduction, piling on information which only confuses the pupil. The mind of the child will usually take the right

direction if matter is properly presented, and if there are not too many interferences and hindrances on the part of the teacher, under the name of helps.'—(*Putnam*.) Herbart says:

'Teaching produces clearness in the mind when the presentations it supplies and uses are not heaped up anyhow, but given in single, small sections,' and 'the parts and their sequence are determined, not by the teacher's caprice, but by the nature of the subject.'

574. In every lesson we give there will be several ideas to present to the pupil. In teaching the elements, there will be ideas about pitch and about time, and the introduction of the symbols belonging to each. In the teaching of pieces there will be ideas about form and phrasing, an appeal to the imagination, and so forth. Or it may be that several presentations of the *same* fact may be needed before it is seen in all its relationship. In teaching a new pulse-group, for instance, we treat it (*a*) as apperceived through the ear; (*b*) through the eye, i.e. with its notation; (*c*) in its purely time-aspect, the pulse *as* a pulse; (*d*) in its rhythmic aspect—travelling *toward* something—illustrating this by directing attention to its use in some piece of familiar music, as  in the 'British Grenadiers.' All these connections have to be established if the new fact or idea is to become a permanent part of the mental content; not only to get into the Dome but to remain there. As Professor Adams expresses it: 'What is wanted at this stage is the new idea, the whole new idea, and nothing but the new idea in

all its important connections.' Well, Herbart tells us to take each of these separately, do one thing at a time, and be sure that one idea is assimilated before we go on to the next.

575. (b) *Concentration and Reflection*.—This fixing of the attention on each idea separately is called by Herbart a *Concentration*. The term explains itself, and we see the need of it. But, he says, each concentration must be succeeded by reflection; the processes must alternate. So we want to know what he means by Reflection. It is not quite a suggestive term to us, because our common use of it does not seem to answer precisely to its technical Herbartian meaning. Yet there is a connection, as we shall see.

576. One Herbartian writer says that Reflection means that 'the mind should have leisure to work by itself on the matter presented to it, or the thinking power may be paralysed.'—(*Carl Ufer*.) This, to me, would seem to point to allowing a sufficient time *between* lessons for the pupils to chew the cud.

577. To another it means giving time for reflection before answering.

'It is a mistake for teachers to urge their pupils to answer rapidly . . . the pupil should have time for individual contemplation, deep and energetic thought-labour.'—*Lazarus*.

Which might work all right with grown-up students. With children we have to act a little differently, though the maxim 'think before you speak' always holds good.

578. Another Herbartian writes:

'The matter should be divided into small, logically con-

nected sections, and the children should concentrate their undivided attention on each of these sections separately, and reflect upon each point until it is mastered.'—*Dodd*.

Now, by this it is not meant that the teacher should pause or allow the pupil or the class to lapse into a brown study. What does reflection mean to us? It means turning the matter over in our minds, thinking about it; an essentially active process. Children cannot do this without help; and so, after each concentration the teacher has to see to it that the pupils do this very thing—turn the matter over in their minds, and see each part in connection with the other parts. We must link up again what, for clearness, we have separated.

'To restore the mental links between the separated parts is the work of reflection.'—*Herbart*.

579. In the practical application of the theory Herbartians are not very clear. In specimen lessons on the Herbartian plan I find Reflection represented by a summing up of the results of each part of the lesson, putting a short sentence or keyword on the blackboard. This is only what, in most school subjects, would be done by any teacher. For pupils over twelve, and for some subjects, it would be all that is needed, especially if the summarizing is done by the pupils and not for them (332). But for younger children the treatment must be different. Reflection, in such circumstances, seems to me to mean simply a breathing space between the little sections of a lesson, in which we may test, in any way suitable

to the subject, whether that little section is understood, and so guard against hurrying the child too quickly from one thinking-step to another.

580. The younger the child the more important it is thus to break up the lesson. In the Preliminary Course of the 'Child Pianist' Method several of the method-units are thus split up, a row of stars showing the limits of each 'Concentration.' It is not till the unit is worked through—and this may require several 'lessons'—that its unity is perceived. Intelligent children, especially if they do not begin till about eight years old, may run through all the necessary 'Concentrations' in one lesson. If a child can learn the names of all the digitals, or take in all the lines of the staff in one lesson, by all means let him. Don't insist on children taking very small steps if their mental legs are long enough to take bigger ones—and if a child says 'Please let me go on,' it is well to strike while the iron is hot; but there will be all the more repetition and drill required to make the knowledge sure.

581. Professor Adams speaks of Reflection as 'a certain diffusion of attention over the whole of that part of the lesson to which the new idea specially belongs,' and says that it consists in 'bringing the new idea into its new place, and seeing how it fits into its surroundings.' Now this, though he was not thinking about music teaching at all, applies particularly well to our subject.

582. Suppose that a pupil or a class has, so far, learnt to recognize half-pulses, i.e. to hear

two sounds in a pulse, to give the time-names for the various forms of pulses so divided, and to write them. We are then ready to take the next step, the introduction of , and do something like this:

Asking the pupil to listen for something new we tap out, on blackboard or keyboard, a four-pulse measure, taking care *not* to include the new pulse straight away. We may do this more than once.

Next time *with* the new pulse (perhaps .

‘Anything new?’

‘Listen again. On which pulse do you hear the new group?’

‘And now?’

‘And now again?’

‘How many sounds in that new pulse?’

We give the time-name, and some drill in its patter. .

So far the concentration has been on the new thing only. The other pulses are scarcely heard, because attention was concentrated on the recognition of this alone (162).

But now we ask for a whole measure to be *taa’d* back, giving, perhaps, .

The concentration is not so complete. There is a diffusion of attention over the whole measure, and also a linking up of the new pulse-group with others already familiar.

Several tests like this. and then—

'Listen to this *tune*. Do you hear any *tafa-téfé* pulses in it? Hands up when you hear one.'

Here there is a further diffusion of attention, and a linking up between time and tune, separated before for clearness; and the new pulse-group is heard in its place in a bit of actual music.

583. In dealing with the notation of the pulse-group the process is much the same. The symbol being given, the ear-tests are now *written*. Then, in a reading exercise or a duet that illustrates that lesson, the pupil points out all the *tafa-téfé* pulses before beginning. The mental links are made, and the pupil both sees and hears how the new fact fits into its surroundings.

584. We are advised that 'several short concentrations are preferable to a single long one.' Many dictations, then, many reading tests, many listening to tunes, but all short. Our total music-time is limited, there is much to be done, and we must aim at rapid response in all departments (123). Every ear exercise is a concentration; and the reading exercises or duets, in which the 'new idea' is found in a great variety of combination, are means whereby the new bit of knowledge is 'worked up into the very warp and woof' of the pupil's mental content.

585. Preparation is analytic. Presentation is synthetic, a joining up of new and old, an addition to the pupil's mental possessions.

586. I have dwelt at some length on these two steps because in dealing with children they are important. Writers on the subject tell us that further than this we cannot go with young children,

because these steps, Preparation and Presentation, deal with the concrete, with objects actually present, with percepts—and children are at the perceptual stage. With regard to most of the school subjects this is true; but I have pointed out elsewhere (252) that music is a concrete subject all the way through, a perpetual object lesson, its material always at hand for examination (525), and in the application of the steps the nature of the subject has to be considered.

Third Step. Association.

587. We are told that the Third Step passes 'from the consideration of individual things to the relations that exist between things,' and that 'the best way to make this step is by conversation between the pupil and the teacher.'

588. The seeking for relations involves comparison, and we have seen how an unconscious comparison of things is always going on in the little child's mind, that through it he classifies and re-classifies, noting likenesses and differences, and that through it his percepts grow into concepts (219).

589. In the teaching of the elements of music, all lessons from the beginning include the seeing of relations—relation of sounds, high and low, long and short, to each other; relations of pulse, accent, and measure to one another, of staff to keyboard, of things heard to things seen, i.e. of sound to symbol. In the following up of each topic, or 'element,' the relation of the new to the old must be realized as we tack on. And all this

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has to be a conscious process, an intellectual exercise. A pupil too young for this should not be having formal music lessons.

590. You can see that this Association step would apply particularly to the interpretative and appreciative part of the music lesson. The finding of rhythmic and melodic imitations in the child's first little tunes and reading exercises—that first easy step toward the realization of form, or 'shape,' in music; the listening for change of key, and looking for it as symbolic perception develops; the appeal to the imagination, and so on. In the conversational stage the whole subject broadens out, and minor links would be added to those more important connections established in the Presentation stage.

591. In thus talking round a point we must be careful not to get too far away from it. There is always much that might be said to increase a pupil's interest; but, after all, the business of the moment is the newly-presented idea.

592. In this step the pupils begin to see their way from the particular to the general, and so work into the next step, Generalization; for 'the work of the fourth step is to make use of the results of the third.'

Fourth Step. Generalization.

593. Generalization does not always form part of a lesson. Several lessons may be devoted to working through the instances which are to form the basis of the Generalization. But sometimes the finding of a general principle is the main

object of the lesson, and then we begin by looking back over what we have been doing. We must recapitulate—set out the instances in order—before the pupil can generalize.

594. Herbartians sometimes speak of this step by other names besides Generalization—

Recapitulation. Formulization.

Systematization. Condensation.

All with a suggestive shade of difference, yet all conveying something of the same idea. In recapitulation we naturally would seek to systematize; and formulization—the gathering up of results into a formula or summary—necessitates condensation of the treatment of each point, so that the terms overlap.

595. There is not much scope for generalization in the simple concrete teaching of the elements of music; yet we sometimes do have to draw conclusions from our little experiments, and then the Fourth Step comes into some very elementary work. As, for instance, in the Second Lesson on the Scale ('Guide,' Section IV, Part III), we find after several experiments that the scale-tune *only comes right when the little steps (semitones) are in their proper places*. In the Third Lesson we discover that *every time we shift the scale by over-fifths we have to make one new sound (te)*; and in the Fourth Lesson, *when we shift it by under-fifths we have again to make one new sound, but this time fah*. The final lesson on the dot (Step 4) is a generalization from the pupil's experiences in the three previous steps.

596. Children (and others) are apt to generalize

rashly, and sweeping statements that cannot be taken seriously might be quoted even from philosophers. So, whatever may be our subject, a part of our work will be to teach our pupils, very gradually and simply, how to generalize and how to summarize the results of their generalization. We can only do this by 'thinking the pupil's thought,' as Professor Welton expresses it; following it and guiding it and helping it to take form in fitting words.

Fifth Step. Application.

597. 'The Fifth Step consists in the translation of theory into practice, the application of knowledge to doing.'—(*Adams.*) All school subjects cannot be tested by immediate practice. The invaluable lessons of history and literature may not bear fruit in action for years. The Application Step waits upon opportunity. True, the little ones will reproduce their history lessons in their play. Immediate action for them, though it be but make-believe. The 'let-me-do-it' instinct will not wait, and each one wants to play the hero. The youth and the girl keep their imaginings to themselves, but ideas are growing, ideals built up. The year 1914 was a year of opportunity. Then boys bade smiling good-byes to their mothers, though under the bravery of their uniform they wore an identification disc. Then girls who never waited on themselves waited on rough soldiers, carried meals and washed up dishes; and some, who loved not the look of a butcher's shop, drove ambulances laden with writhing, dripping,

mutilated humanity. And we wondered. Called it heroism, patriotism, and what not. But the boys and girls did not call it anything at all, only felt that they must go. It was the *Fifth Step* in the long lesson of history and literature—ideas, slowly gathered, bursting into action at the touch of opportunity.

598. In other departments, however, the teaching can be, and must be, tested at once, and tested by doing. In teaching arithmetic we call for the immediate application of every rule, and the more practical the application the better. We test knowledge of the grammar of a foreign tongue by the invention of new sentences. The pupil here works back from the general to the particular, because only by particular examples can the grasp of a general rule be proved.

599. The music lesson is pre-eminently one in which this fifth step is essential; for not only must 'rules' be worked for and applied, but every little bit of knowledge from the very beginning, must be rubbed in by doing and tested by doing (116). In short, though the fourth step may be omitted, or even the third, we cannot do without the fifth. Every little new fact that is brought into the pupil's experience gives new scope and variety and interest to this application step, and the test of 'behaviour' is the only reliable test (115). So the simplest music lesson should include at least three steps, Preparation, Presentation, and Application.

600. Now, we must not make a fetish of all this, or feel unhappy if we cannot map out every

lesson into five steps. A lesson may be occupied with one step only; or several lessons may be devoted to the Application step, as when pupils are studying scales and chords and their connection. Indeed, if this is not done the learner may miss the important fact, so effectively veiled by notation, that *the same things happen in every key*.

601. It was never claimed that the processes embodied in the steps were new. From time immemorial teachers, if they were teachers at all, have done such things instinctively. But there is a decided advantage in using them consciously, in using them in order, in seeing the connection with one another; so that in providing us with this very handy framework for lesson-giving Herbartians have done us good service.